WEST

Searches for User *imarx* (Count = 2517)

Queries 2468 through 2517.

S #	Updt	Database	Query	Time	Comment
S2517	U	USPT	5753473	2002-03-18 12:23:05	
S2516	U	USPT	4608202	2002-03-18 12:19:49	
S2515	U	USPT	((methanol or ethanol or propanol or butanol)same ((methanol or ethanol or propanol or butanol)same lipase)) not (((methanol or ethanol or propanol or butanol)same ((methanol or ethanol or propanol or butanol)same lipase))same (acid))	2002-03-18 08:44:19	
S2514	U	USPT	((methanol or ethanol or	2002-03-18 08:44:03	

			propanol or butanol)same ((methanol or ethanol or propanol or butanol)same lipase)) same (acid)	
S2513	U	USPT	acid	2002-03-18 08:43:12
S2512	U	USPT	(methanol or ethanol or propanol or butanol) same ((methanol or ethanol or propanol or butanol)same lipase)	2002-03-18 08:42:20
S2511	U	USPT	(oil or coconut or cocoanut) same lipase	2002-03-18 08:42:04
S2510	U	USPT	oil or coconut or cocoanut	2002-03-18 08:41:18
S2509	U	USPT	oil or coconut or cocoanut	2002-03-18 08:41:09
S2508	U	USPT	(transesterif$5) same (lipase) same (methanol or ethanol or propanol or butanol)	2002-03-18 08:37:03
S2507	U	USPT	methanol or ethanol or propanol or butanol	2002-03-18 08:36:36
S2506	U	USPT	lipase	2002-03-18 08:36:10
S2505	U	USPT	transesterif$5	2002-03-18

				08:35:47
S2504	U	USPT	2242230	2002-03-15 12:56:59
S2503	U	USPT	5,639,860	2002-03-15 12:29:41
S2502	U	USPT	6194195	2002-03-15 12:28:12
S2501	U	USPT	(acid value) same (lipase)	2002-03-15 09:58:19
S2500	U	USPT	lipase	2002-03-15 09:58:09
S2499	U	USPT	acid value	2002-03-15 09:57:34
S2498	U	USPT	((oil or triglyceride)same (lipase)same (methanol)) and (deacidif$4)	2002-03-15 08:53:16
S2497	U	USPT	(oil or triglyceride) same (lipase) same (methanol)	2002-03-15 08:52:53
S2496	U	USPT	((coconut or cocoanut)) same (lipase) same (methanol)	2002-03-15 08:52:32
S2495	U	USPT,JPAB,EPAB,DWPI	((coconut or cocoanut)) same (lipase) same (methanol)	2002-03-15 08:51:51
S2494	U	USPT	(deacidif$4) and (((coconut or cocoanut))same (oil or triglyceride)same (lipase))	2002-03-15 08:48:25
S2493	U	USPT	(deacidif$4) and l15L16	2002-03-15 08:48:11
S2492	U	USPT	deacidif$4	2002-03-15 08:48:00

S2491	U	USPT	((coconut or cocoanut)) same (oil or triglyceride) same (lipase)	2002-03-15 08:47:38
S2490	U	USPT	(((coconut or cocoanut))same (oil or triglyceride)same (lipase))	2002-03-15 08:47:26
S2489	U	JPAB,EPAB,DWPI	((coconut or cocoanut)) same (oil or triglyceride) same (lipase)	2002-03-15 08:47:16
S2488	U	JPAB,EPAB,DWPI	(methanol) and (lipase) and (oil or triglyceride)	2002-03-15 08:32:52
S2487	U	JPAB,EPAB,DWPI	(methanol) and (lipase) and ((coconut or cocoanut))	2002-03-15 08:32:37
S2486	U	JPAB,EPAB,DWPI	(methanol) and (lipase) and (oil or triglyceride) and ((coconut or cocoanut))	2002-03-15 08:32:04
S2485	U	JPAB,EPAB,DWPI	(coconut or cocoanut)	2002-03-15 08:31:51
S2484	U	JPAB,EPAB,DWPI	oil or triglyceride	2002-03-15 08:31:32
S2483	U	JPAB,EPAB,DWPI	lipase	2002-03-15 08:31:23
S2482	U	JPAB,EPAB,DWPI	methanol	2002-03-15 08:31:10
S2481	U	USPT	((coconut or cocoanut)) same (oil or triglyceride) same (lipase) same (methanol)	2002-03-15 08:30:35
S2480	U	USPT	methanol	2002-03-15 08:30:12

S2479	U	USPT	lipase	2002-03-15 08:30:04
S2478	U	USPT	oil or triglyceride	2002-03-15 08:29:35
S2477	U	USPT	(coconut or cocoanut)	2002-03-15 08:29:15
S2476	U	USPT	5639860	2002-03-14 18:45:48
S2475	U	USPT	6018038	2002-03-14 18:17:37
S2474	U	PGPB	Colleotrichum	2002-03-14 18:17:10
S2473	U	PGPB	oh	2002-03-14 18:16:36
S2472	U	PGPB	6018038	2002-03-14 18:15:09
S2471	U	PGPB	(fruit or vegetable or stem or plant) same (porcine near4 esterase)	2002-03-14 18:04:56
S2470	U	PGPB	porcine near4 esterase	2002-03-14 18:04:30
S2469	U	PGPB	fruit or vegetable or stem or plant	2002-03-14 18:04:16
S2468	U	JPAB,EPAB,DWPI	(porcine near4 esterase) and (plant)	2002-03-14 18:02:39

> d ab bib l14 tot

L14 ANSWER 1 OF 7 USPATFULL
AB Production of monoglycerides is enhanced by means of enzymatic transesterification of triglycerides with aliphatic alcohols in a medium of supercritical CO.sub.2. Aliphatic primary and secondary alcohols of 1 to 8 carbon atoms may be used without support in supercritical CO.sub.2 at temperatures compatible for enzymatic transesterifion of tryglycerides. Utilization of these lower reaction temperatures has the benefit of diminishing the production of undesired side products and thus increasing the reaction efficiency with regard to production of the desired monoglycerides.
AN 1998:48224 USPATFULL
TI Monoglyceride production via enzymatic glycerolysis of oils in supercritical CO.sub.2
IN Jackson, Michael A., Morton, IL, United States
PA The United States of America, as represented by the Secretary of Agriculture, Washington, DC, United States (U.S. government)
PI US 5747305 19980505
AI US 1996-679368 19960710 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Lilling, Herbert L.
LREP Silverstein, M. Howard, Lipovsky, Joseph A., Fado, John D.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 315
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS
AB Derivs. of (11E)-10-oxo-11-octadecen-13-olide (I) and its seco-acid (II) were synthesized from linoleic acid for purpose of elucidation of their cytotoxic activity. Linoleic acid was converted into (13S, 9Z, 11E)-13-hydroxy-9,11-dienoic acid (III) by soybean lipoxygenase-catalyzed oxidn. followed by treatment with NaBH4. III was cyclized by the Yamaguchi and the Mitsunobu methods to give 14-membered lactones (S)-IV and (R)-IV, resp., which reacted with oxygen and triethylsilane in the presence of Co(tdcpp) (as a catalyst) followed by acetylation-decompn. of the intermediary hydroperoxide to produce (S)-I and (R)-I. **Lipase**-catalyzed hydrolysis of (R)-I gave hydroxy keto acid (R)-II. The redn.-oxygenation of a dienoic ester prepd. from III afforded an oxo deriv., which was deprotected to give hydroxy keto acid (S)-II. The other derivs. related to I and II were synthesized in a similar manner. On the other hand, (E)-4-hydroxy-2-nonenal (HNE) and (E)-4-hydroxy-2-hexenal (HHE), cytotoxic aldehydes produced during **lipid** peroxidn. in biol. system, were synthesized in one step from com. available 2,4-alkadienals by the Co(tdcpp)-catalyzed redn.-oxygenation. Deuterium-labeled HNE and HNE were prepd. by use of triethyldeuterosilane and 2-**propanol**-d instead of triethylsilane and 2-**propanol** on the redn.-oxygenation of 2,4-alkadienals. The IC50 **values** of the **fatty acid** derivs. were detd. against P388 mouse leukemia cells. I showed the strongest cytotoxicity among the derivs., however, no difference in cytotoxicity was found between the optically active and racemic forms of I. The cytotoxicity of the macrolides was enhanced compared with the corresponding seco-acids.

The enone moiety in I and II is considered to be important for the cytotoxic action.

AN 1999:313232 CAPLUS
DN 131:257356
TI Syntheses of fatty acid derivatives derived from lipid peroxidation by the application of cobalt porphyrin-catalyzed reduction-oxygenation
AU Matsushita, Yoh-ichi; Sugamoto, Kazuhiro; Matsui, Takanao
CS Faculty of Engineering, Miyazaki University, Miyazaki, 889-2155, Japan
SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1998), 40th, 613-618
CODEN: TYKYDS
PB Nippon Kagakkai
DT Journal
LA Japanese

L14 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
AB Structured **lipids** (SL) contg. n-3 polyunsatd. (eicosapentaenoic or docosahexaenoic) and medium chain (caprylic) **fatty** acids were synthesized in gram quantities and characterized. Tricaprylin was mixed with n-3-rich polyunsatd. **fatty** acids in a 1:2 molar ratio and transesterified by incubating at 55.degree.C in hexane with SP 435 **lipase** (10% by wt of total substrates) in a 125-mL Erlenmeyer flask as the bioreactor. After several batches of reaction, the products were pooled and hexane was evapd. Short-path distn. was used for purifn. of synthesized SL. The distn. conditions were 1.1 Torr and 170.degree.C at a feed flow rate of 3 mL/min. Up to 240 g of SL was isolated and deacidified by alk. extn. or **ethanol**-water solvents. The **fatty** acid profile, free **fatty acid value**, sapon. no., iodine **value**, peroxide **value**, thiobarbituric **acid**, and conjugated diene contents were detd. Oxidn. stability, with .alpha.-tocopherol as antioxidant, and the oxidative stability index were also detd.
AN 1998:258973 CAPLUS
DN 129:15983
TI Characterization of enzymically synthesized structured lipids containing eicosapentaenoic, docosahexaenoic, and caprylic acids
AU Lee, Ki-Teak; Akoh, Casimir C.
CS Department of Food Science and Technology, The University of Georgia, Athens, GA, 30602, USA
SO J. Am. Oil Chem. Soc. (1998), 75(4), 495-499
CODEN: JAOCA7; ISSN: 0003-021X
PB AOCS Press
DT Journal
LA English

L14 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS
AB A review with 15 refs. on a method for detg. acids based on measurement of redn. prepeak current of 2-methyl-1,4-naphthoquinone (VK3) in **ethanol** soln. The instrumentation by voltammetry, flow injection anal. (FIA) with electrochem. detection and High-performance liq. chromatog. (HPLC) with electrochem. detector was capable of measuring acids. Prepeak height on the voltammogram obtained in **ethanol** soln. contg. acid, 3 mM VK3 and 38 mM LiClO4 was linearly related to acid concn. at 8 .mu.M to 6 mM. FIA response was linear between 25 to 1500 pmol of acid. FIA was found not only sensitive, but also to be simple and rapid. **Acid values** of **fats** and **oils**, acidity of coffee, and enzyme activity of **lipase** were detd. Free **fatty** acids in a soya bean **oil** were detd. by

HPLC, the mobile phase of **ethanol**-acetonitrile (10:90) mixt., and a VK3 **ethanol** soln. contg. LiClO4. The present method is practically useful for acid detn. of samples in various fields.

AN 1999:82364 CAPLUS
DN 130:266432
TI Amperometric determination of acids
AU Kusu, Fumiyo
CS Tokyo Pharmaceutical College, Japan
SO Dojin News (1998), 89, 3-7
CODEN: DONEEA; ISSN: 0385-1516
PB Dojin Kagaku Kenkyusho
DT Journal; General Review
LA Japanese

L14 ANSWER 5 OF 7 USPATFULL
AB A water-soluble substrate and an oily substrate are continuously reacted with immobilized lipase in a reaction vessel having vertically maintained apart upper and lower conically-shaped regions, respectively, for separation of a water-soluble product and an oily product, a plurality of lipase reaction zones each containing immobilized lipase capable of being fluidized and an agitating means, and a plurality of intermediate separation zones for separation of an oily substance and a water-soluble substance. The lipase reaction zones and the intermediate separation zones are disposed alternately between the upper and lower conically-shaped separation regions. Boundaries between the lipase reaction zones and intermediate separation zones are pervious to liquid but impervious to the immobilized lipase. The water-soluble substrate and oily substrate are passed in counterflow contact through the lipase reaction zones and intermediate separation zones and mutually contact the immobilized lipase which has been fluidized. An oily product is recovered from the upper conically-shaped separation region and a water-soluble product is recovered from the lower conically-shaped separation region.

AN 91:32376 USPATFULL
TI Method for continuous reaction with fluidized immobilized lipase
IN Kosugi, Yoshitsugu, Tsukuba, Japan
Tanaka, Hideoki, Tsukuba, Japan
Suzuki, Hideo, Tokyo, Japan
Shiraki, Masaru, Tsukuba, Japan
PA Agency of Industrial Science & Technology, Tokyo, Japan (non-U.S. government)
Ministry of International Trade & Industry, Tokyo, Japan (non-U.S. government)
PI US 5010004 19910423
AI US 1988-255599 19881011 (7)
PRAI JP 1987-255057 19871009
DT Utility
FS Granted
EXNAM Primary Examiner: Naff, David M.
LREP Oblon, Spivak, McClelland, Maier & Neustadt
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 845
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 6 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AB Rice is the principal raw material of sake, and its quality largely

affects sake manufacturing; peripheral layers of brown rice grain contain large amounts of **lipids** which are considered to be undesirable for sake quality, but the details are not clearly elucidated. In sake brewing, rice is polished before use, one of the main purposes of the process is to remove the undesirable **lipids**. Although content of ether extractable **lipid** (I), mainly **triglyceride** (TG), decreases most rapidly with decrease of polishing ratio, content of **fat** by hydrolysis (II), main component of polished rice **lipids**, remains nearly constant, 0.6%. Palmitic (C16:0), oleic (C18:1) and linoleic acid (C18:2) are the main **fatty** acids components of I, and the ratio of the total amounts of saturated **fatty** acids (SFA) to those of unsaturated ones (S/U) shows a tendency to increase with decrease of the polishing ratio; the tendency is especially remarkable in TG fraction. In II, C16:0 is predominant and a little change is observed on the composition of **fatty** acids with the polishing ratio. During steaming process, TG of I decreases to 30-50% of the original amount. The free **fatty** acids (FFA) produced by hydrolysis of glycerides evaporate successively with steam during the process, particularly a large amounts of unsaturated **fatty** acids (UFA) are removed, and consequently the value of S/U increases. It is also proved tthat stimulative hydrolysis of glycerides by steeping of rice in **lipase** solution causes removal of more greater amounts of UFA. Rice-koji for sake brewing contains 0.31 to 0.56% of I and 0.53 to 0.67% of II. TG, FFA and monoglycerides (MG) are the main components of I, and **fatty** acids of these **lipids** are rich in UFA such as C18:2 and C18:1. The ratio of UFA in I changes with the rice-koji making conditions such as aeration and temperature progress. Aeration has the greater effect. Rice-koji preparation under limited aeration causes a marked decrease in the production of C18:2 with a corresponding increase of C18:1. As the fermentation of sake mash proceed, steamed rice and rice-koji are digested and solid fraction in mash decreased, and about 58% of II in raw materials becomes extractable with ether. Because of low solubility of **lipid** in water, a large proportion of **lipids** remains in the decreasing solid fraction. A small amount of **lipid** is liberated in liquid fraction (liberated **lipid**: III), which increases according to the increase of alcohol concentration in mash and reaches about 500 ppm of the liquid fraction at the final stage of fermentation. Main components of III and I of the solid fraction are FFA, TG and ethyl esters of **fatty** acids (EtOR). II of solid fraction is mostly consisted of FFA. Since EtOR is not found in raw materials, it seems to be formed by yeast during fermentation. Each fraction of FFA, TG and EtOR is shown to have characteristically different **fatty acid** composition, respectively. The **value** of S/U increases during fermentation. Since it is shown that the yeast cultured under the alcoholic fermentation condition synthesizes a large quantity of stearic acid (C18:0), most of this acid found in III is considered to be formed by yeast during the fermentation. The formation of esters such as ethyl acetate (EtOAc) and isoamyl acetate (iAmOAc) found in a medium are highly dependent on the **fatty** acid composition; SFA and their derivatives added to the medium promote the formation of the esters by various yeast strains, while UFA and their derivatives strongly supress their formation. These effects of **fatty** acid on the formation of esters have been proved by many pilot plants and full scale sake brewings. These esters largely contribute the excellent flavor of

sake and a sake rich in these esters is usually preferred as a good sake in many sensory contests. The **fatty** acid added to the medium is intactly incorporated into yeast cellular **lipids** such as TG and phosphatidylcholine (PG), even though some of them does not originally exist in sake yeast Kyokai no. 7 cells. It is, therefore, considered that **fatty** acid composition of the yeast cellular **lipids** remarkably differs with the kind of **fatty** acid added to the medium, but presumbly within the physiological tolerance of the cells. As well know, PG is one of the major components of biomembrane **lipids** . Physical and chemical properties of diacyl groups or **fatty** acid composition of the **lipids** play a crucial role in the function of biomembrane. The synthesis of acetic-esters in yeast cell occures via alcoholysis of acetyl-CoA catalyzed with Acetyl-CoA: alcohol acetyltransferase (AATFase). The maximum activity of AATFase appears at the late stage of exponential growth phase. The enzyme preparation having high specific activity is predominantly associated with a microsomal fraction, and the activity is maximum at pH 6.6 and 30.degree. C. Of alcohol tested, the enzyme exhibits the highest activity to C6 alcohol, and 16% and 30% of the activity to isoamyl alcohol are found in **ethanol** and isobutanol respectively. Treatment of microsomes with ether, **phospholipase** A2, or **lipase** causes decrease in AATFase activity. The deactivated preparations are partially restored their acetic-ester synthesizing activity by addition of lecithin or C16:0, while C18:2 is not effective or strongly inhibits the activity. From the facts described above, it may be presumed that the formation of esters by sake yeast is affected by the inhibition of AATFase bound to cell membranes with UFA and the changes of permeability of the esters through cell membranes which depends largely on the kind of **fatty** acyl chains or **fatty** acid composition of membrane **lipids**.

AN 1986:141806 BIOSIS
DN BA81:52222
TI CHANGES OF LIPIDS DURING SAKE BREWING AND THEIR CONTRIBUTION TO ESTER FORMATION BY YEAST.
AU YOSHIZAWA K; ISHIKAWA T
CS NATIONAL RESEARCH INST. BREWING, 2-6-30 TAKINOGAWA, KITA-KU, TOKYO 114, JAPAN.
SO HAKKOKOGAKU KAISHI, (1985) 63 (2), 161-174.
CODEN: HKOKDE. ISSN: 0385-6151.
FS BA; OLD
LA Japanese

L14 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS
AB **Fats** and **oils** are transesterified in a continuous 2-step reaction, i.e. hydrolysis followed by esterification, with **lipase** (EC 3.1.1.3) [9001-62-1] as the catalyst. The reaction is facilitated by addn. of alc. to either (or both) steps and enzyme efficiency is improved by binding to a fixed solid support. Thus, 103 mg of Rhizopus delemar **lipase** (98,000 units/g), which attacks the **triglyceride** 1 and 3 position, dissolved in 2.0 g water, was absorbed on 20 g of a chitosan acetate-celite carrier. The fixed enzyme was added to a mixt. of 38 g palm **oil**, 120 g hexane and 2.5 g **butanol** [71-36-3], with stirring, to effect hydrolysis in a closed reactor, at 40.degree.. After 2 h, 20 g stearic acid [57-11-4], in the presence of N (to remove water vapor), were added, and the esterification was conducted at 40.degree. for 12 h. The **triglyceride**, diglyceride, monoglyceride, free **fatty** acid, **fatty** acid alc. ester, and **acid values** , after completion of the 1st step and in the final product, were 29.7 and

46.9%, 26.2 and 5.0%, 4.6 and 0.0%, 11.1 and 11.5%, 28.4 and 36.5%, and 21.0 and 20.6, resp. The product is suitable for use as a cocoa butter substitute.

AN 1985:111894 CAPLUS
DN 102:111894
TI Reaction method for transesterifying fats and oils
IN Maruzeni, Shoji; Matsumoto, Wataru; Yasuda, Nozomi
PA Asahi Denka Kogyo K. K. , Japan
SO Eur. Pat. Appl., 51 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 126416	A1	19841128	EP 1984-105522	19840515
	EP 126416	B1	19880107		
	R: DE, FR, GB, NL, SE				
	JP 59213390	A2	19841203	JP 1983-88167	19830519
	JP 03061423	B4	19910919		
	JP 60019495	A2	19850131	JP 1983-126392	19830712
	JP 03065949	B4	19911015		
	JP 60203196	A2	19851014	JP 1984-57739	19840326
	JP 03065950	B4	19911015		
	US 4874699	A	19891017	US 1986-898513	19860821
PRAI	JP 1983-88167		19830519		
	JP 1983-126392		19830712		
	JP 1984-57739		19840326		
	US 1984-611964		19840518		

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(FILE 'HOME' ENTERED AT 07:50:14 ON 19 MAR 2002)

FILE 'CAPLUS, BIOSIS, AGRICOLA, USPATFULL, WPIDS' ENTERED AT 07:50:31 ON 19 MAR 2002

L1	3823	S DEACIDIF?
L2	60356	S ACID (3A)VALUE?
L3	234704	S ?LIPASE? OR ESTERASE?
L4	3054512	S OIL? OR LIPID? OR FAT?
L5	122009	S TRIGLYCERID?
L6	3081004	S L4 OR L5
L7	8	S L1 (P) L3 (P) L5
L8	8	DUP REM L7 (0 DUPLICATES REMOVED)
L9	858566	S ETHANOL OR METHANOL OR BUTANOL OR PROPANOL OR ALKANOL?
L10	0	S L7 (P) L9
L11	33630	S TRANSESTERIF?
L12	1702	S L9 (P) L6 (P)L3
L13	8	S L12 (P) L2
L14	7	DUP REM L13 (1 DUPLICATE REMOVED)

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=> DIS HIST

     (FILE 'HOME' ENTERED AT 07:50:14 ON 19 MAR 2002)

     FILE 'CAPLUS, BIOSIS, AGRICOLA, USPATFULL, WPIDS' ENTERED AT 07:50:31 ON
     19 MAR 2002
L1          3823 S DEACIDIF?
L2         60356 S ACID (3A)VALUE?
L3        234704 S ?LIPASE? OR ESTERASE?
L4       3054512 S OIL? OR LIPID? OR FAT?
L5        122009 S TRIGLYCERID?
L6       3081004 S L4 OR L5
L7             8 S L1 (P) L3 (P) L5
L8             8 DUP REM L7 (0 DUPLICATES REMOVED)
L9        858566 S ETHANOL OR METHANOL OR BUTANOL OR PROPANOL OR ALKANOL?
L10            0 S L7 (P) L9
L11        33630 S TRANSESTERIF?
L12         1702 S L9 (P) L6 (P)L3
L13            8 S L12 (P) L2
L14            7 DUP REM L13 (1 DUPLICATE REMOVED)
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